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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,459	11/14/2001	Tarou Kaneko	NEC01P205-H1a	6999

7590 11/21/2003
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EXAMINER

WONG, ERIC K

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/987,459	KANEKO, TAROU	
	Examiner	Art Unit	
	Eric Wong	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8,10,12,16,31-34,36,38,40 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8,12,31-34 and 38 is/are allowed.
- 6) ☒ Claim(s) 10,16,36,40 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 11-16, filed 8/22/03, with respect to the rejection(s) of claim(s) 16, and 42 under Lin, Ando and Han have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of 35 U.S.C. 112 errors.

2. Applicant's arguments, with respect to claims 12 and 38, have been fully considered and are persuasive. The rejection of claims 12 and 38 has been withdrawn. The prior art made of record fails to explicitly disclose the central axes of selected input waveguides inclined from a perpendicular to said surface at a focusing position to attenuate a signal.

3. Applicant's arguments, with respect to claims 10 and 36 have been fully considered and are not considered persuasive. Applicant argues that Lin fails to disclose, teach or suggest "wherein central axes of selected input waveguides are displaced along a direction perpendicular to central axes of said input waveguides from corresponding focusing positions by predetermined values to attenuate said signal lights propagated through said selected input waveguide." In figure 7A of Lin, the input waveguides (22) are displaced in a direction perpendicular to the central axes of the focusing portions. Although not adjustable in height, they are fixed in a plane which is perpendicular to the central axes of the focusing portion.

4. Applicant's arguments, with respect to claim 40 have been fully considered but they are not persuasive. Applicant argues that Lin fails to disclose, teach or suggest, "wherein selected widths of selected input waveguides which are axially aligned with corresponding focusing portions comprise predetermined values to attenuate signal light." As seen in figures 7B and 7C,

the widths are axially aligned with focusing portions to attenuate light. Regardless of what the width is set to in the prior art reference, it would be a value that is predetermined.

Claim Rejections - 35 USC § 112

1. Claims 16 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 12 of claim 16 and lines 6-7 of claim 42, applicant claims, “wherein lengths which extend from ends of selected input waveguides”. Examiner is confused as to what lengths applicant is claiming.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10, 36, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent Number 6,181,849 to Lin et al.

As to claim 40, Lin discloses in figures 7A-7C, an arrayed waveguide grating comprising:

- One or plural input and output waveguides for inputting signal lights;
- A plurality of input and output waveguides for outputting signal lights;
- A channel waveguide array having waveguides which are successively longer with predetermined waveguide length differences (67);

- An input slab waveguide connecting an input end of said channel waveguide array to said input waveguides; and
- An input and output slab waveguide (65) connecting an input end of said channel waveguide array to said output waveguides and having optical input/output characteristics set to predetermined ratios for the respective output waveguides with respect to said input waveguides (Column 6, Lines 48-53).

As to claims 10, and 36, input ends of the waveguides have central positions displaced from corresponding focused positions in a direction perpendicular to central axes of the input waveguides (Figure 7A).

Allowable Subject Matter

2. The following is a statement of reasons for the indication of allowable subject matter:
The prior art made of record fails to explicitly disclose the central axes of selected input waveguides inclined from a perpendicular to said surface at a focusing position to attenuate a signal. Therefore, claims 12 and 38 are allowed.
3. Claims 5-8, and 31-34 are allowed for reasons stated in the prior office action.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

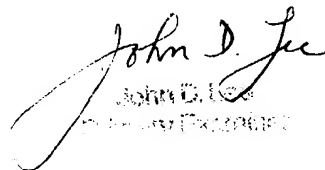
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Wong whose telephone number is 703-305-4741. The examiner can normally be reached on Monday through Friday, 830AM - 430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 703-308-4819. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

EW



John D. Lee
John D. Lee
Patent Examiner